## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 12 May 2005 (12.05.2005)

PCT

## (10) International Publication Number WO 2005/041998 A1

(51) International Patent Classification7: A61K 38/00

(21) International Application Number:

PCT/US2003/031078

(22) International Filing Date: 2 October 2003 (02.10.2003)

(25) Filing Language:

English

(26) Publication Language:

**English** 

(71) Applicants and

- (72) Inventors: ALI, Sadat, M. [US/US]; 626 Swinford Road, Bartlett, IL 60103 (US). AL-HABDAN, Ibrahim [SA/SA]; P.O. BOX 40071, 31952 AL-KHOBAR KFUH
- (74) Agents: LITMAN, Richard, C. et al.; Litman Law Offices, Ltd., P.O. Box 15035, Crystal City Station, Arlington, VA 22215 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO. RU. SC. SD. SE. SG. SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PEPTIDE FOR PROMOTING HEALING OF FRACTURES

(57) Abstract: The peptide for promoting healing of fractures is a 13-amino acid peptide which is sequenced and synthesized in the laboratory. The peptide SHMSP has the sequence represented by the formula Met-Ile-Phe-Val-Lys-Thr-Leu-Thr-Gly-Lys-Thr-Ile-Leu. The peptide stimulates bone growth and accelerates healing of bone fractures. The peptide of the present invention has a low molecular weight. Consequently, it is absorbed in the body and excreted from the kidneys relatively easily.